

IN THE CLAIMS:

Please add new claims as follows:

1-35. (Cancelled)

36. (New) A mask for imaging a lithographic pattern by use of a lithographic exposure apparatus, said mask comprising:

a substrate;

a first pattern corresponding to at least one non-critical feature to be imaged, said first pattern comprising one of a low-transmission phase-shift feature and a non-phase-shifting feature formed on said substrate,

a second pattern corresponding to at least one critical feature to be imaged, said second pattern comprising a chromeless phase-shift feature generated by etching said substrate, and

at least one optical proximity correction feature for reducing optical proximity effects.

37. (New) A mask according to claim 36, wherein said optical proximity correction feature comprises a scattering bar disposed adjacent at least one of said first pattern and said second pattern.

38. (New) A mask according to claim 36, wherein said optical proximity correction feature comprises a serif disposed on an end portion of at least one said first pattern and said second pattern.

39. (New) A mask according to claim 36, further comprising a third pattern corresponding to an angled feature which extends at an angle relative to at least one of the first pattern and the second pattern, said third pattern comprising one of a low-

transmission phase-shift feature, a weak phase-shift feature and a non-phase-shifting feature.

40. (New) A mask according to claim 36, wherein said first pattern can further be implemented utilizing a weak phase-shift feature.

41. (New) A mask according to claim 36, wherein said low-transmission phase-shift feature comprises a 5-8% transmission attenuated phase-shift feature.

42. (New) A mask according to claim 36, wherein said low-transmission phase-shift feature comprises a non-phase-shifting chrome feature.

43. (New) A mask according to claim 36, wherein said chromeless phase-shift feature exhibits 100% transmission.

44. (New) A method of forming a mask on a substrate for imaging a lithographic pattern by use of a lithographic exposure apparatus, said method comprising the steps of:

forming a first pattern on said substrate corresponding to at least one non-critical feature to be imaged, said first pattern comprising one of a low-transmission phase-shift feature and a non-phase-shifting feature,

forming a second pattern on said substrate corresponding to at least one critical feature to be imaged, said second pattern comprising a chromeless phase-shift feature generated by etching said substrate, and

at least one optical proximity correction feature for reducing optical proximity effects.

45. (New) A method according to claim 44, wherein said optical proximity correction feature comprises a scattering bar disposed adjacent at least one of said first pattern and said second pattern.

46. (New) A method according to claim 44, wherein said optical proximity correction feature comprises a serif disposed on an end portion of at least one said first pattern and said second pattern.

47. (New) A method according to claim 44, further comprising forming a third pattern corresponding to an angled feature which extends at an angle relative to at least one of the first pattern and the second pattern, said third pattern comprising one of a low-transmission phase-shift feature, a weak phase-shift feature and a non-phase-shifting feature.

48. (New) A method according to claim 44, wherein said first pattern can further be implemented utilizing a weak phase-shift feature.

49. (New) A method according to claim 44, wherein said low-transmission phase-shift feature comprises a 5-8% transmission attenuated phase-shift feature.

50. (New) A method according to claim 44, wherein said low-transmission phase-shift feature comprises a non-phase-shifting chrome feature.

51. (New) A method according to claim 44, wherein said chromeless phase-shift feature exhibits 100% transmission.

52. (New) A method according to claim 44, further comprising the step of subjecting said mask to a single exposure utilizing said lithographic exposure apparatus, said single exposure operative for printing both said critical feature and said non-critical feature.

53. (New) A device manufacturing method comprising the steps of:

- (a) providing a first substrate that is at least partially covered by a layer of radiation-sensitive material;
- (b) providing a projection beam of radiation using a radiation system;
- (c) using a pattern on a mask to endow the projection beam with a pattern in its cross-section;
- (d) projecting the patterned beam of radiation onto a target portion of the layer of radiation-sensitive material,

wherein, in step (c), use is made of a mask comprising:

- a second substrate;
- a first pattern corresponding to at least one non-critical feature to be printed on said first substrate, said first pattern comprising one of a low-transmission phase-shift feature and a non-phase-shifting feature formed on said second substrate,
- a second pattern corresponding to at least one critical feature to be printed on said first substrate, said second pattern comprising a chromeless phase-shift feature generated by etching said second substrate, and
- at least one optical proximity correction feature for reducing optical proximity effects.

54. (New) The device manufacturing method according to claim 53, wherein said optical proximity correction feature comprises a scattering bar disposed adjacent at least one of said first pattern and said second pattern.

55. (New) The device manufacturing method according to claim 53, wherein said optical proximity correction feature comprises a serif disposed on an end portion of at least one said first pattern and said second pattern.

56. (New) The device manufacturing method according to claim 53, further comprising a third pattern corresponding to an angled feature which extends at an angle relative to at least one of the first pattern and the second pattern, said third pattern comprising one of a low-transmission phase-shift feature, a weak phase-shift feature and a non-phase-shifting feature.

57. (New) The device manufacturing method according to claim 53, wherein said first pattern can further be implemented utilizing a weak phase-shift feature.

58. (New) The device manufacturing method according to claim 53, wherein said low-transmission phase-shift feature comprises a 5-8% transmission attenuated phase-shift feature.

59. (New) The device manufacturing method according to claim 53, wherein said low-transmission phase-shift feature comprises a non-phase-shifting chrome feature.

60. (New) The device manufacturing method according to claim 53, wherein said chromeless phase-shift feature exhibits 100% transmission.

61. (New) A computer program product for controlling a computer comprising a recording medium readable by the computer, means recorded on the recording medium for directing the computer to generate at least one file corresponding to a mask for use in a lithographic imaging process, said generation of said file comprising the steps of:

generating data representing a first pattern corresponding to at least one non-critical feature to be printed on a wafer, said first pattern comprising one of a low-transmission phase-shift feature and a non-phase-shifting feature,

generating data representing a second pattern corresponding to at least one critical feature to be printed on said wafer, said second pattern comprising a chromeless phase-shift feature generated by etching a substrate, and

at least one optical proximity correction feature for reducing optical proximity effects.

62. (New) The computer program product according to claim 61, wherein said optical proximity correction feature comprises a scattering bar disposed adjacent at least one of said first pattern and said second pattern.

63. (New) The computer program product according to claim 61, wherein said optical proximity correction feature comprises a serif disposed on an end portion of at least one said first pattern and said second pattern.

64. (New) The computer program product according to claim 61, further comprising a third pattern corresponding to an angled feature which extends at an angle relative to at least one of the first pattern and the second pattern, said third pattern comprising one of a low-transmission phase-shift feature, a weak phase-shift feature and a non-phase-shifting feature.

65. (New) The computer program product according to claim 61, wherein said first pattern can further be implemented utilizing a weak phase-shift feature.